

S.N.: 10/656,403
Art Unit: 2634

AMENDMENTS TO THE DRAWINGS:

The attached seven sheets of formal drawings are herewith filed to replace the five sheets of informal drawings that were originally filed with the application.

Attachment: Replacement Sheets 1-7 of formal drawings
Annotated Sheets Showing Changes (not applicable, as no changes are made)

REMARKS

Claims 1-3 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Fischer et al. (US 2003/0160654), claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Sander et al. (US 2004/0208157), claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. in view of Numanami et al. (US 6,617,927) and Lipschutz (US 5,068,833), claims 9-11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. in view of Vanhecke (US 5,216,384), claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. and Vanhecke and further in view of Numanami et al. and Lipschutz, claims 7 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. and Numanami et al. and further in view of Sander et al., and claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al., Numanami et al. and Sander et al. and further in view of Vanhecke. These rejections are respectfully disagreed with, and are traversed below.

The Applicants have reviewed the cited prior art, and note the following.

Fischer et al. clearly cannot be said to have a "plurality of control signals", as in claims 1, 9 and 17. Figure 1 of Fischer et al. instead appears to have three outputs from the control block 20, but two of these, namely the output signals to the DACs 30 and 35, are the signal itself, i.e., the I and Q branches of the signal. These cannot be considered to be "control signals". In fact, the only "control signal" shown in Fischer et al is the bias control, as indicated by the signal passing through the DAC 90. Note that in Figure 1B (8-PSK) of the instant patent application there is a corresponding signal shown as IREF. In the GMSK mode of operation, as illustrated by Figure 1A, this signal is not used. Instead, the bias current for the PA 12 comes from the Vpc signal 18A.

This being the case, it is clear that Fischer et al. cannot anticipate claims 1-3 and 8, or render obvious independent claims 9 and 17, as claims 1, 9 and 17 each refer at least in part to "setting a plurality of control signals for the RF transmitter".

The Examiner is respectfully reminded that for a rejection to be made on the basis of anticipation, it is well recognized that "to constitute an anticipation, all material elements recited in a claim must be found in one unit of prior art", Ex Parte Gould, BPAI, 6 USPQ 2d, 1680, 1682 (1987), citing with approval In re Marshall, 578 F.2d 301, 304, 198 USPQ 344, 346 (CCPA 1978). The disclosure of Fischer et al. also does not suggest or render obvious the claimed subject matter.

The Examiner also considers the RF attenuator of claim 2 to correspond the resistor 100 of Fischer et al. The Applicants disagree with the Examiner's characterization, as Fischer et al. clearly teach the resistor 100 as simply a resistance through which the quiescent current from DAC 90 is fed to the power transistor (see paragraph [0028]). Accordingly, the signal passing through resistor 100 is not an RF signal, and thus the resistor 100 cannot be considered to be an "RF attenuator".

Still further, while Fischer et al. do describe adjusting the quiescent current of an amplifier, this teaching as such does not appear to be particularly germane to the invention as claimed. Instead, the claims are variously directed at least in part to switching between fixed gain and variable gain modes of the RF transmitter between consecutive time slots. Related to this, in the fixed gain mode, an RF attenuator (24 in the present application) is employed. None of these features are described in Fischer et al.

This being the case, those claim rejections that rely on Fischer et al. are traversed.

Turning now to Sander et al., Figures 15 and 16 show both a linear and a non-linear amplifier. However, the corresponding portions of the description reveal that these figures describe alternative architectures, i.e., an IQ-architecture and a polar architecture, respectively. Sander et al. are not seen to disclose any type of dynamic switching between these two architectures.

Numanami et al. describe one possible way to implement a transmitter using an amplifier both in a fixed gain mode and in a variable gain mode. However, there does not appear to be any suggestion in Numanami et al that these modes could be switched between adjacent time slots.

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Lipschutz appears to simply relate to a receiver that receives information from a plurality of channels.

In any event, in order to advance this patent application towards issuance the independent claims 1 and 9 have been amended to include the subject matter of claims 5 and 6, and 13 and 14, respectively, and at least for the reasons discussed above are clearly patentable over the cited prior art. Claims 5, 6, 13 and 14 are cancelled without prejudice or disclaimer, and the remaining claims 1-4, 7-12 and 15 are clearly in condition for allowance.

Note that claim 17 as filed refers in part to the setting of a "plurality of control signals for the RF transmitter", and further states:

"during a guard period between the first timeslot and a next, temporally adjacent timeslot, setting the plurality of control signals for the RF transmitter in accordance with a second modulation format used during the second timeslot, where one of the modulation formats is 8-PSK using a power amplifier in a fixed gain mode and where the other of the modulation formats is GMSK using the power amplifier in a variable gain mode, where one of the plurality of control signals sets the power amplifier gain and is ramped during the guard period, and where another one of the plurality of control signals sets the power amplifier quiescent current." (emphasis added)

Claim 17 is also clearly patentable over the proposed combination of Fischer et al., Numanami et al. and Sander et al., as are the dependent claims 18 and 19, for at least the reasons discussed above.

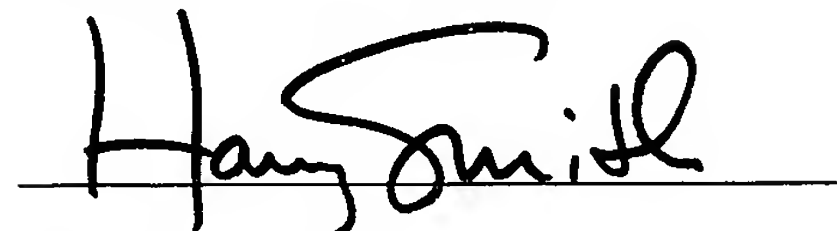
The Examiner is respectfully requested to consider the rejections of claims 1-4, 7-12 and 15-19, and to allow these claims.

Claims 20-35 are newly added, and are also deemed to be patentable for at least the reasons argued above. Support for these claims is found throughout the specification and drawings as filed. For example, support for claims 20-25 can be found at least at page 8, lines 5-8. No new matter is added.

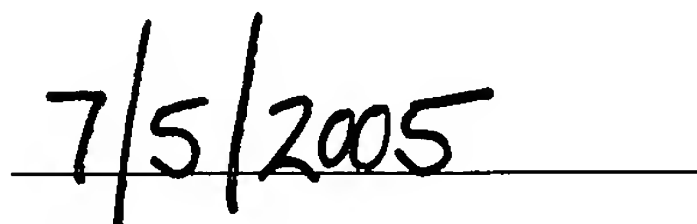
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The Examiner is respectfully requested to reconsider and remove the rejections of the claims, and to allow all of the pending claims 1-4, 7-12 and 15-35, as now presented for examination. An early notification of the allowability of all of the pending claims is earnestly solicited.

Respectfully submitted:



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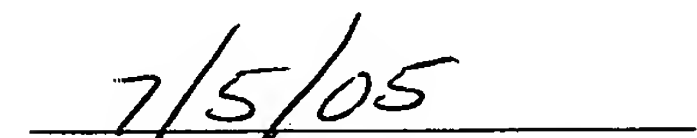
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